

English Longitudinal Study of Ageing

Andrew Steptoe

Primary objectives

To collect longitudinal data on health, disability, economic circumstances, social participation, and well-being, from a representative sample of the English population aged 50 and older

To explore the unfolding dynamic relationships between health and functioning, social participation, and economic position and well-being, as people plan for, move into and progress beyond retirement

Timeline

Year	Modality	Sample	Refreshment
Wave 1 (2002/3)	CAPI	12,100	HSE 1998-2000
Wave 2 (2004/5)	CAPI + Nurse visit	9,432	
Wave 3 (2006/7)	CAPI	9,771	HSE 2001-04
Wave 4 (2008/9)	CAPI + Nurse visit	11,050	HSE 2006
Wave 5 (2010/11)	CAPI	10,274	
Wave 6 (2012/13)	CAPI + Nurse visit	10,437	HSE 2009-11
Wave 7 (2014/5)	CAPI	9,666	HSE 20011-12
Wave 8 (2016/17)	CAPI + Nurse visit (50%)	8,443	
Wave 9 (2018/19)	CAPI + Nurse visit (50%)	8,736	HSE 2014-15
COVID 1 (2020)	Internet + Telephone	7,040	
2 (2020)		6,794	
Wave 10 (2021/23)	CAPI/CAVI	7,242	HSE 2017-18

ELSA study features

- Multidisciplinary collaboration
 - Epidemiology, economics, psychology, sociology, clinical medicine, biology
- Representative sample
 - Representative geographically and demographically of people living in England aged 50 and over
- Open access
 - Data deposited in accessible archives within 8-12 months

ELSA organisation

- Department of Epidemiology and Public Health, UCL
Steptoe, Marmot, Zaninotto
- Institute for Fiscal Studies
Banks, Blundell, Cribb, Oldfield,
- Department of Sociology, University of Manchester
Nazroo
- Norwich Medical School, University of East Anglia
Steel
- NatCen Social Research
Wood, Taylor, Lloyd

ELSA measures

Demographic data

- Household membership
- Living relatives
- Marital status
- Ethnic group
- Country of birth
- Education
- Occupation of main carer when respondent was aged 14 years
- Proximity to closest child & grandchildren
- Citizenship

Income and assets

- Earnings
- Sources of income
- Pensions (private, state, contributions, etc)
- Financial and physical assets
- Housing wealth and mortgage debt
- Business wealth
- Debt
- Life insurance
- Lifetime inheritances and gifts
- State pension deferral
- Attitudes to financial risk

Employment and consumption

Employment

- Employment situation
- Job details
- Health limiting ability to work
- Retirement and reasons for retirement
- Job security
- Part-time working
- Place of work, travel to work

Consumption

- Housing and housing problems
- Vehicle and durables ownership
- Household outgoings/expenditures
- Transfers (charity, children)
- Clothing, leisure,
- transport expenditure
- Electronic banking

Future expectations and cognition

Expectations

- Survival
- Future health
- Employment
- Retirement
- Finance and future income
- Bequests and inheritances
- Housing situation
- **Future housing and care needs**

Cognitive Function

- Subjective and objective memory
- Executive function
- Numerical ability, literacy
- **Fluid intelligence**
- Proxy interview of cognitive functioning
- **HCAP**

Social and civic activity and participation

Social and civic participation

- Informal caregiving
- Volunteering/unpaid help
- Social networks/isolation
- Social clubs, organisations
- Social support
- Loneliness
- Use of Transport
- Social capital
- Accessing local amenities and services
- Perceptions of neighbourhoods
- Social and cultural participation
- Provision of grandparental child care
- Internet access and use
- Perceived discrimination
- Religiosity
- Time use yesterday

Psychosocial measures

Psychosocial factors

- Control and demand
 - Effort-reward balance
 - Subjective social status
 - Relative deprivation and perceived financial difficulties
 - Ages at which middle age ends and old age begins
 - Self-perceived and desired ages
 - Experience and perceptions of ageing
- Altruism, generativity
 - Sense of collectiveness
 - Pet ownership
 - Experiences of mentoring
 - Personality

Health measures

Physical Health

- Self-rated health
- Mobility
- Sensory function (hearing, eyesight)
- Physician diagnosed conditions
- Falls/balance
- Chronic pain
- Quality of health care
- Activities of daily living
- Diagnostic symptom assessments:
Rose Angina, MRC respiratory questionnaire, Edinburgh claudication questionnaire
- Hip, knee replacement
- Incontinence
- Social prescribing
- Cancer screening
- Dental health
- Polypharmacy
- Menopause
- Sensory function (taste, smell)
- Objective hearing test
- COVID-19, Long-COVID
- COVID vaccination

Mental well-being and health behaviour

Behavioural health

- Smoking/smoking history
- Alcohol consumption
- Physical activity (leisure, work)
- Consumption of fruit and vegetables
- Body weight
- Sleep duration and sleep disturbance
- Nutrition
- Sexual attitudes and behaviour
- Food poverty
- E-cigarettes

Mental health

- Psychiatric and emotional problems
- General Health Questionnaire (GHQ-12)
- CES-D depression scale
- Anxiety

Psychological well-being

- Quality of life (CASP-19)
- Satisfaction With Life
- Positive affect
- ONS wellbeing scales

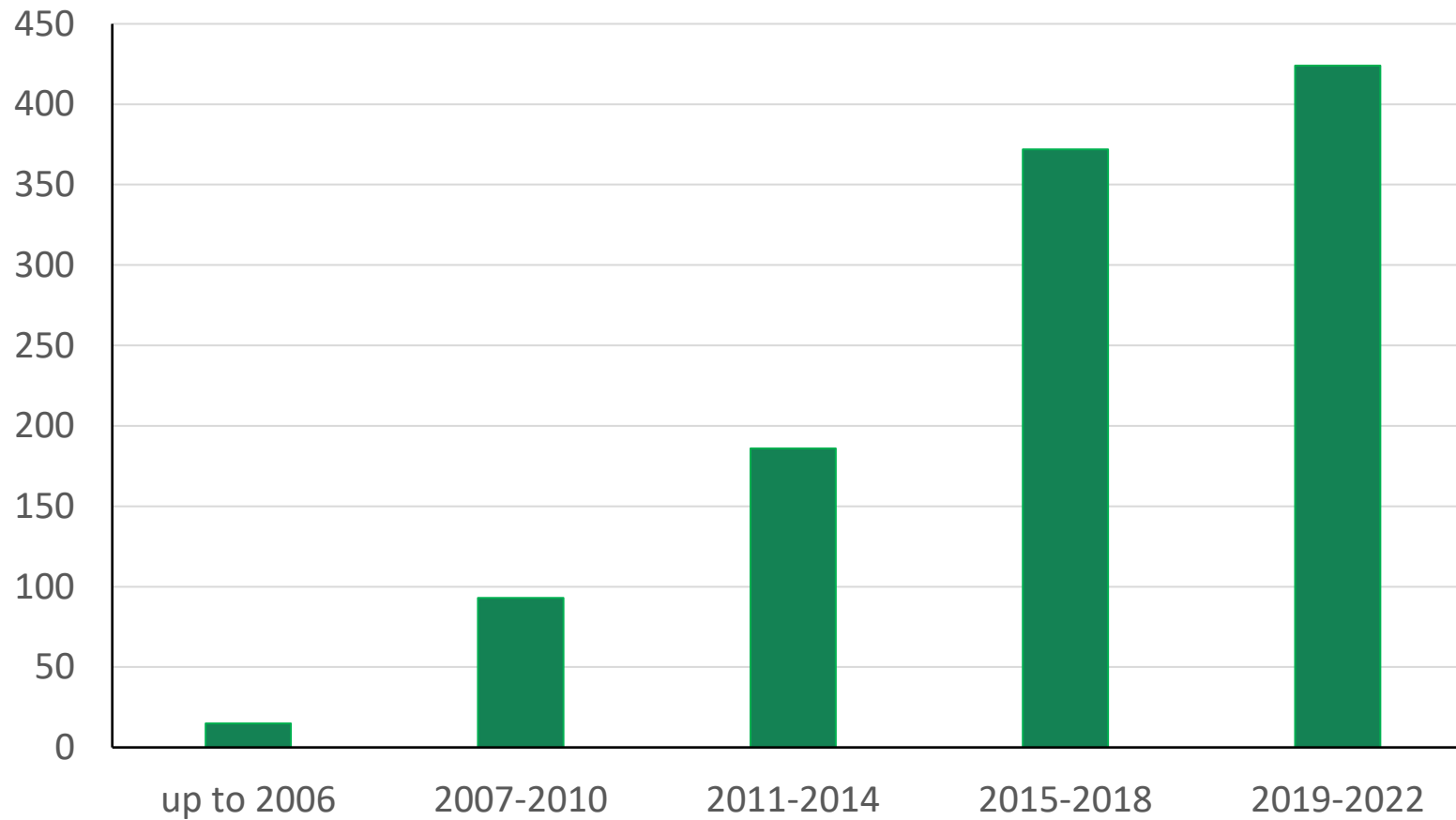
Biomarkers and physical performance measures

Wave 2 (2004/5)	Wave 4 (2008/9)	Wave 6 (2012/13)	Wave 8/9 (2016/19)
Weight, height, waist	Weight, height, waist	Weight, height, waist	Weight (in main interview) Waist (nurse visit)
Grip, balance, chair rise, tandem stand, leg raise, timed walk	Grip, balance, chair rise, tandem stand, leg raise, timed walk	Grip, balance, chair rise, tandem stand, leg raise, timed walk	Grip Timed walk
Blood pressure, lung function	Blood pressure, lung function	Blood pressure, lung function	Blood pressure
Lipids, triglycerides, HbA1c, glucose	Lipids, triglycerides, HbA1c, glucose	Lipids, triglycerides, HbA1c, glucose	Lipids, triglycerides HbA1c, glucose
C-reactive protein, fibrinogen	C-reactive protein, fibrinogen, white blood cell count	C-reactive protein, fibrinogen, white blood cell count	C-reactive protein, fibrinogen, white blood cell count
Haemoglobin, ferritin	Haemoglobin, ferritin	Haemoglobin, ferritin	Haemoglobin, ferritin
DNA	(DNA)	(DNA)	
	IGF-1, DHEAS	IGF-1, Vitamin D	IGF-1, Vitamin D
Apolipoprotein E		Cortisol, DHEA, cortisone, testosterone, progesterone (hair)	PAXgene tubes

Special features of ELSA

- Genetic data and polygenic risk scores
- Sexual attitudes and behaviour module (twice)
- Comprehensive nutritional assessment in 2018/19
- Harmonized Cognitive Assessment Protocol (HCAP)
- Two waves of data collection during the COVID-19 pandemic
- COVID-19 seropositivity (April/May 2021)
- Accelerometry in 2022/23
- Proteomics and metabolomics in subsamples

Growth of ELSA scientific outputs



ELSA involvement in policy

- Evidence to Parliamentary committees
- Briefings to central Government Departments: HM Treasury; Health and Social Care; Work and Pensions; Transport; Levelling Up, Housing and Communities; Digital, Culture, Media and Sport
- Work with Arm's Length Bodies: Centre for Ageing Better; Office for National Statistics
- Charities: Age UK; International Longevity Centre
- International: US National Academy of Sciences; Organisation for Economic Co-operation and Development (OECD); U.S. Surgeon General; EU DGs

Funding of ELSA

- Department of Health and Social Care
- Department for Work and Pensions
- Department for Transport
- National Institute for Health and Care Research
- Department for Education and Skills
- Department for Environment, Food and Rural Affairs
- HM Treasury
- Office for National Statistics
- Economic and Social Research Council
- National Institute on Aging

Structure of the conference

- Inequalities in later life
- Cross-national comparisons of ageing
- Experience during the COVID-19 pandemic
- Cognitive decline and dementia
- Economic activity and ageing
- Future plans